

ABSTRACT

DWBL A coiled-sheet stent includes a tubular body having a longitudinal axis and a circumference, and a plurality of cylindrical bands formed in the tubular body, each band having a zig-zag pattern including a series of sequential diagonal elements connected to one another and extending about the circumference. A plurality of longitudinal connectors extend between and connect adjacent bands. The diagonal elements have an arcuate shape, all diagonal elements in each band being oriented in either a clockwise or counter-clockwise direction about the circumference. The tubular body is expandable between contracted and enlarged conditions, and the zig-zag pattern is expandable between unstretched and unstretched conditions, the zig-zag pattern being biased towards the stretched condition above a transition temperature, thereby at least partially defining the enlarged condition. A multi-cellular stent structure is also provided that includes a plurality of bat shaped cells formed in a tubular body, each cell defining a head region, a tail region and opposing curved wing regions, and a plurality of connectors extending between and connecting adjacent cells. The head and tail regions of adjacent cells are directly

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B connected to one another, and connectors extend between adjacent wing regions of adjacent cells.